## Landscape Architecture PS & E Guide

SECTION 3

## **Title Sheets**

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#### **Title Sheets**

#### General

The first sheet of the project plan set is the Title Sheet. A Title Sheet should be prepared on all projects for which a PS&E Submittal is required. The Title Sheet format, available in the Caltrans CADD Cell Library shall be used.

For projects developed by Caltrans personnel, the title sheet of the project shall be prepared by the district, except projects consisting entirely of bridge, building, or other transportation related structures work (no road plans). Where only structure-related plans are required for the project plan set, the responsible unit in the Office of Structure Design shall prepare the title sheet.

Title sheets for city or county projects involving federal funding are usually prepared by the respective city or county and shall conform to the requirements outlined in this section.

The Title Sheet should be a neat, clear, and concise presentation of the project. Compared to other sheets of the plans, it is widely distributed. It is sometimes used for press releases, public hearings, by mapmakers in updating their maps and by contractors to locate the work.

The finished Title Sheet includes a strip map of the project, small-scale State map (location map on the sheet format), an index of the plan sheets inserted by Headquarters, the signature and registration seal of the person in responsible charge for preparation of the entire project, project description, limits of construction and work, mandatory material or disposal sites (if any), graphic scale (if applicable), contract number and project identification block information.

No more than one sheet shall be used to present necessary title sheet information for any one project, unless a table is needed for locations of construction and no room is available on the title sheet. When this condition exits, the listing of locations of construction is to be shown on a separate sheet. See "Locations of Construction" on page 3-12 within this section for additional instructions.

The project location shall be indicated on the preprinted location map as shown under "<u>Title Sheet Location Map Samples</u>" on page 3-13 in this section.

The "<u>Checklist for Title Sheets</u>" on page 3-14 at the end of this section lists the various elements included on the title sheet.

Additional title sheet elements to be included after PS&E submittal to DES-OE or on AADD projects consist of:

- an index of plans (all sheets in the project plan set, including applicable new and revised standard plans); group sheets by type.
- sheet numbers and total sheets,
- project federal funding identification number, if federal funds are involved.

The information on the title sheet shall be limited to that identified in the previous paragraph and the "Checklist for Title Sheets" on page 3-14. Features such as typical cross sections, construction details, drainage details, construction area signs, and quantity summaries shall not be shown on the title sheet. The predominant type of work to be performed on the project (widening, surfacing, etc.) should not be identified by either labeling or symbol. The type of work is described in the project special provisions. The type of work may be added to the title sheet as part of the As-Built change process.

#### Strip Map

The strip map should be to a convenient scale that best fits the size of the Title Sheet.

Route Adoption maps, Freeway Agreement maps, Title Sheets for prior projects, USGS quadrangle maps and the Department's Road System (County Road) maps are good sources for the information required as the base for the strip maps. Do not use AAA maps or Thomas Brothers Guide mapping because of copyright laws. District post mile maps are unsuitable and shall not be used.

In those cases where a project may be constructed in several stages, or where a number of adjacent projects will be constructed, consideration should be given to preparation of an overall strip map. This strip map, or portions thereof, could be used for all projects and adjusted photographically to the scale desired for each project.

The strip map should show, as applicable to the project:

- city limit lines, county lines, state and international boundaries,
- existing streets, public roads and highways,
- railroads, canals, rivers, lakes, dams, bridges, parks, and prominent geographic features, (these items are shown for orientation purposes),
- township, range and section lines in rural areas, only where needed to show right of way ownership.
- special topographical features, such as transmission lines and aqueducts,
- major improvements such as courthouses, post offices, hospitals, schools, large industrial sites, and other private facilities only when they have a direct effect on the project and will be referred to in the project special provisions.
- names of roads or other features referred to in the project title, the project special provisions, and other contract-related documents,
- highways of major importance should show destinations at map edges,
- physical features labeled with their official titles.

A heavy solid line should be used to designate the limits of construction for each roadway, ramp, connector, crossroad, frontage roads, etc. involved in constructing the project.

The alignment of the route or routes where construction is to be performed shall be stationed at intervals of 50, 20, or 10 stations depending upon the size of the strip map.

Station equations and post mile equations (with a numerical difference of a 0.1 mile or more) within the limits of construction shall be shown.

Where the alignment of the main route intersects the alignment of other state routes, the station and post mile equations at the intersection of routes should also be shown.

Post mile equations, within the limits of construction, which reflect a change in prefix only, need not be shown (i.e. R32.2 where "R" indicates realignment of a route). Post mile prefixes and their use are as follows:

C-commercial lanes

D-duplicate post mile at meandering county lines

G-reposting duplicate post mile at the end of a route

H-realignment of D mileage

R-first realignment

M-realignment of R mileage

N-realignment of M mileage

L-overlap post mile

S-spur

T-temporary connection

Structures shall be shown by symbol and identified by name and type. The various types of structures are: overcrossing, undercrossing, separation, viaduct, bridge, underpass, overhead, and a combination of bridge and overhead. See Figure 62.2 of the Highway Design manual for a depiction of the various types of structures.

The structure number shall only be included with the structure name and type of structure when construction or work is to be performed on the structure as part of the overall project. The actual structure plans shall be prepared or coordinated by the Office of Structure Design. On complex projects with construction on multiple structures, the structures can be denoted on the strip map by a numerical reference. Where this occurs, the structures are to be listed together with the numerical reference and corresponding structure names and structure numbers. Refer to the Bridge Design Details Manual for information on developing structure plans.

Limits of construction and limits of work shown on the strip map shall conform to the instructions under the subheading "Project Limits of Construction and Work" on page 3-11 within this Section.

#### State Location Map

The county or counties in which the project is located shall be indicated on the State location map as shown on the sheet entitled "Title Sheet Location Map Samples," on page 3-13 of this manual. The State location map is part of the title sheet border.

#### Index of Plans

The district shall not complete the index of plans on the title sheet for projects that are not Authority to Advertise District Delegated (AADD). For non-AADD projects, DES-OE will add the index of plans to the title sheet prior to advertisement. For AADD projects, the district must complete the index of plans.

#### **Listing of Standard Plans**

The list of project applicable standard plans, revised standard plans and new standard plans must be included in the project special provisions, entitled Standard Plans List, SSP Std Pln.

#### Signature and Registration Information

The title sheet of the project plans shall have the license seal and signature of the lowest classification licensed person in responsible charge for preparation of the entire project. For detailed information see the Plans Preparation Manual (US Customary Units) March 2007 or newer, Chapter 2-1.6 Electronically-Generated Plan Sheet Signatures and Project Development Names.

#### **Project Identification Block**

The district, county, route, post mile(s), and individual sheet numbers are to be included in the project identification block. The sheet number and total number of sheets are to be left blank for projects which are not AADD. Division of Engineering Services-Office Engineer (DES-OE) will insert the sheet number and total number of sheets. For AADD projects, include both sheet number and total number of sheets. The county or counties in which the project is located shall be abbreviated as shown County Abbreviations in this Section.

Project Identification Block (upper right corner of plan sheet)

| DIST | COUNTY | ROUTE | POST MILE<br>TOTAL PROJECT | SHEET<br>No. | TOTAL<br>SHEETS |
|------|--------|-------|----------------------------|--------------|-----------------|
|      |        |       |                            |              |                 |

#### Project Construction is on One Route

a. The project consists of one location on one route with a length of construction greater than 0.2 mile. The "From...To..." format is used in the project description to describe the location. A slash is used between the associated post miles for begin and end of construction.

#### Example:

| DIST | COUNTY | ROUTE | POST MILE<br>TOTAL PROJECT | SHEET<br>No. | TOTAL<br>SHEETS |
|------|--------|-------|----------------------------|--------------|-----------------|
| 07   | LA     | 5     | 74.9/79.3                  |              |                 |

#### Project Construction is on One Route continued

b. The project consists of two locations on one route (with individual lengths of construction 0.2 mile or greater). The "From...

To..." format is used in the project description to describe each location. A slash is used between the associated post miles for begin and end of construction for each location and a comma is used between the two sets of post miles.

Example:

| DIST | COUNTY | ROUTE | POST MILE<br>TOTAL PROJECT | SHEET<br>No. | TOTAL<br>SHEETS |
|------|--------|-------|----------------------------|--------------|-----------------|
| 07   | LA     | 5     | 74.9/79.3, 81.2/83.5       |              |                 |

c. The project consists of two locations on one route with one construction location 0.2 mile or greater in length and one construction location less than 0.2 mile (spot location). The "From...To..." format is used in the project description to describe the location 0.2 mile or greater in length. A slash is used between the associated post miles for begin and end construction for this location followed by a comma then followed by a single post mile to describe the spot location. Example:

| DIST | COUNTY | ROUTE | POST MILE<br>TOTAL PROJECT | SHEET<br>No. | TOTAL<br>SHEETS |
|------|--------|-------|----------------------------|--------------|-----------------|
| 07   | LA     | 5     | 74.9/77.6, 78.9            |              |                 |

d. The project consists of two locations on one route with individual lengths of construction less than 0.2 mile (spot locations). A single post mile is used to describe each location separated by a comma.

#### Example:

| DIST | COUNTY | ROUTE | POST MILE<br>TOTAL PROJECT | SHEET<br>No. | TOTAL<br>SHEETS |
|------|--------|-------|----------------------------|--------------|-----------------|
| 06   | Fre    | 99    | 43.9/45.7                  |              |                 |

e. The project consists of one location on one route with an individual length of construction less than 0.2 mile (spot location). A single post mile is used to describe the location.

#### Example:

| DIST | COUNTY | ROUTE | POST MILE<br>TOTAL PROJECT | SHEET<br>No. | TOTAL<br>SHEETS |
|------|--------|-------|----------------------------|--------------|-----------------|
| 01   | Men    | 1     | 80.8                       |              |                 |

f. The project consists of one or more locations within a 0.6 mile radius of the center of a route separation. A single post mile is used for each route to describe the location.

#### Example:

| DIST | COUNTY | ROUTE | POST MILE<br>TOTAL PROJECT | SHEET<br>No. | TOTAL<br>SHEETS |
|------|--------|-------|----------------------------|--------------|-----------------|
| 07   | LA     | 5,118 | 63.4, 18.3                 |              |                 |

#### Project Construction is on One Route continued

g. The project consists of three or more locations on the same route where each location is 0.2 mile or greater. The "From...To..." format is used in the project description to describe the beginning of the first location as the begin point of construction and the end of the last location as the end point of construction. A slash is used between the associated post miles for begin and end of construction.

#### Example:

| DIST | COUNTY | ROUTE | POST MILE<br>TOTAL PROJECT | SHEET<br>No. | TOTAL<br>SHEETS |
|------|--------|-------|----------------------------|--------------|-----------------|
| 07   | LA     | 101   | 0.2/7.2                    |              |                 |

h. The project consists of three or more locations on the same route where each location is less than 0.2 mile. The "From...To..." format is used in the project description to describe the beginning of the first location as the begin point of construction and the end of the last location as the end point of construction. A slash is used between the associated post miles for begin and end of construction.

Each spot location shall be identified by number. A table with a heading of "Locations of Construction" shall be used to list all of the project's location numbers and associated post miles. The "Locations of Construction" table is to be placed on the Title Sheet when sufficient space if available. When the magnitude of locations does not allow room for the tabulation on the Title Sheet (typically more than 15 locations), the tabulation of all the location of construction shall be placed on a separate sheet called "Locations of Construction". The "Locations of Construction" sheet shall immediately follow the Title Sheet. When the "Locations of Construction" sheet is used, a note is to be placed on the Title Sheet directing attention to the added sheet. Example: "The table of locations of construction is shown on the Locations of Construction sheet."

#### Project Construction is on Two Routes

a. The project consists of two locations which are on two different routes with each length of construction 0.2 mile or greater. The "From...To..." format is used in the project description to describe each location. Both routes are shown with a comma between them. A slash is used between the associated post miles for the begin and end of construction for each location and a comma is used between the two sets of post miles. Routes are listed in numerical order. The order of listing the post miles is to match the order of listing the routes.

#### Example:

| DIST | COUNTY | ROUTE | POST MILE<br>TOTAL PROJECT | SHEET<br>No. | TOTAL<br>SHEETS |
|------|--------|-------|----------------------------|--------------|-----------------|
| 11   | SD     | 8, 67 | 26.2/26.5, 0.2/0.5         |              |                 |

#### Project Construction is on Two Routes continued

b. The project consists of two locations which are two different routes where the length of construction on one route is 0.2 mile or greater and the length of construction on the other route is less than 0.2 mile. Both routes are shown with a comma between them. The "From...To..." format is used in the project description to describe the location 0.2 mile or greater. A slash is used between the associated post miles for the begin and end of construction for this location followed by a comma then followed by a single post mile to describe the spot location. Routes are listed in numerical order. The order of listing the post miles is to match the order of listing the routes.

#### Example:

| DIST | COUNTY | ROUTE | POST MILE<br>TOTAL PROJECT | SHEET<br>No. | TOTAL<br>SHEETS |
|------|--------|-------|----------------------------|--------------|-----------------|
| 11   | SD     | 8, 67 | 26.2/26.5, 0.5             |              |                 |

c. The project consists of two locations which are on two different routes with individual lengths of construction less than 0.2 mile (spot locations). Both routes are shown with a comma between them. A single post mile is used to describe each location separated by a comma. Routes are listed in numerical order. The order of listing the post miles is to match the order of listing the routes.

#### Example:

| DIST | COUNTY | ROUTE | POST MILE<br>TOTAL PROJECT | SHEET<br>No. | TOTAL<br>SHEETS |
|------|--------|-------|----------------------------|--------------|-----------------|
| 11   | SD     | 8, 67 | 26.5, 0.5                  |              |                 |

#### Example:

| DIST | COUNTY | ROUTE | POST MILE<br>TOTAL PROJECT | SHEET<br>No. | TOTAL<br>SHEETS |
|------|--------|-------|----------------------------|--------------|-----------------|
| 07   | LA     | 14    | 24.8/50.9                  |              |                 |

#### Project Construction is at Three Locations/Routes

Project Construction is at three or more locations, on two or more routes, or at three or more locations in two or more counties.

The following applies:

- Counties, in which the project is located, are listed in alphabetical order with a comma between them. The order of listing the counties may not always match the order of listing the routes.
- · Routes are listed in numerical order.
- No post miles are to be listed in the "Post Mile Block."
   "Var" is to be used in the "Post Miles Block." "Var" represents the various post miles of the different routes.
   Whenever "Var" is used in the "Post Mile Block," a table

- with a heading of "Locations of Construction" shall be included.
- The "Locations of Construction" table is to be used to describe each location of construction by location number, county, route, post mile or post miles.
- The "Locations of Construction" table is to be placed on the Title Sheet when sufficient space is available. When the magnitude of locations does not allow room for the table on the Title Sheet (typically more than 15 locations), the tabulation of all of the locations of construction shall be placed on a separate sheet called "Locations of Construction."
- The "Locations of Construction" sheet shall immediately follow the Title Sheet. When the "Locations of Construction" sheet is used in the project plan set, a note

#### Project Construction is at Three Locations/Routes continued

is to be placed on the Title Sheet directing attention to the added sheet. Example: "The table of locations of construction (county, route, post mile) is shown on the Locations of Construction sheet." Regardless of which sheet the table is placed on, the table shall list all of the project's location numbers and associated counties, routes, and post miles. **Example:** 

| DIST | COUNTY   | ROUTE                         | POST MILE<br>TOTAL PROJECT | SHEET<br>No. | TOTAL<br>SHEETS |
|------|----------|-------------------------------|----------------------------|--------------|-----------------|
| 08   | Riv, SBd | 18, 71, 138,<br>173, 189, 247 | Var                        |              |                 |

On rare occasions, a project may be in more counties than can be listed in the county identification block (generally more than five). When this occurs, use "Var" in the county identification block. When the project is on more than six routes, use "Var" in the route identification block. For these projects, the project description shall include the listing of all counties involved. The project special provisions shall list all counties and routes. A "Locations of Construction" table, as described above, shall be included in the project plans.

#### **County Abbreviations**

The county or counties in which the project is located shall be abbreviated using upper and lower case lettering as shown.

| Alameda      | Ala | Kings       | Kin | Plumas          | Plu | Siskiyou   | Sis |
|--------------|-----|-------------|-----|-----------------|-----|------------|-----|
| Alpine       | Alp | Lake        | Lak | Riverside       | Riv | Solano     | Sol |
| Amador       | Ama | Lassen      | Las | Sacramento      | Sac | Sonoma     | Son |
| Butte        | But | Los Angeles | LA  | San Benito      | SBt | Stanislaus | Sta |
| Calaveras    | Cal | Madera      | Mad | San Bernardino  | SBd | Sutter     | Sut |
| Colusa       | Col | Marin       | Mrn | San Diego       | DF  | Tehama     | Teh |
| Contra Costa | CC  | Mariposa    | Mpa | San Francisco   | SF  | Trinity    | Tri |
| Del Norte    | DN  | Merced      | Mer | San Joaquin     | SJ  | Tulare     | Tul |
| El Dorado    | ED  | Modoc       | Mod | San Luis Obispo | SL0 | Tuolumne   | Tuo |
| Fresno       | Fre | Mono        | Mno | San Mateo       | SM  | Ventura    | Ven |
| Glenn        | Gle | Monterey    | Mon | Santa Barbara   | SB  | Yolo       | Yol |
| Humbolt      | Hum | Napa        | Nap | Santa Clara     | SCI | Yuba       | Yub |
| Imperial     | lmp | Nevada      | Nev | Santa Cruz      | SCr |            |     |
| Inyo         | Iny | Orange      | Ora | Shasta          | Sha |            |     |
| Kern         | Ker | Placer      | Pla | Sierra          | Sie |            |     |
|              |     | I           |     | l               |     | I .        |     |

#### **Route Numbers**

Each route in the State Highway System is given a unique number for identification. Odd numbered routes are generally north to south and even numbered routes are generally east to west.

#### Post Miles

To obtain Post Mile (PM) multiply the existing post miles (PM) by 1.6093. All equations, prefixes and suffixes shall be

retained. The KP system will also restart at county boundaries as the current system does.

#### **Project Description**

The project description, as described within this Section under "<u>Project Descriptions</u>", on page 3-8 must be included on the title sheet before submittal to DES-OF.

#### Title Sheet Header

The title sheet header precedes the project description on the title sheet. The header begins with the phrase "PROJECT PLANS FOR" and continues with a descriptor indicating the type of facility involved and whether construction, building construction, etc. is to be performed.

The most common descriptors are:

- CONSTRUCTION ON STATE HIGHWAY
- BUILDING CONSTRUCTION ON STATE HIGHWAY
- BUILDING CONSTRUCTION
- CONSTRUCTION ADJACENT TO STATE HIGHWAY
- CONSTRUCTION ON AND ADJACENT TO STATE HIGHWAY

#### Additional descriptors are:

- CONSTRUCTION ON CITY STREET
- CONSTRUCTION ON COUNTY ROAD
- CONSTRUCTION ON COUNTY HIGHWAY
- ESTABLISH EXISTING PLANTING

DES-OE should be consulted when a project requires a descriptor not shown above.

#### **Project Descriptions**

#### a) General

The project description contains the following, with the exceptions described herein:

- 1. A listing of the county or counties where the project is located.
- 2. A listing of the city or town where the project is located, except as provided herein,
- 3. The begin and end points of construction or the locations of construction.
  - a. The project description shall describe the begin and end points of construction shown on the title sheet strip map.
  - b. The begin and end points designated in the project description shall be referenced to the nearest existing identifiable point such as, a road, street, or bridge. State and county lines are also acceptable references since they are posted on the ground. Since city limits may change, a specific tie to a city limit should not be used. The referenced identifiable point shall be shown

and labeled. The "Highway Sequence Listing" formerly referred to as "California State Highway Log" and the "California Log of Bridges on State Highways" should be used to identify post mile of reference points used in the project description. The "Highway Sequence Listing" is available at this website:

http://onramp.dot.ca.gov/hq/traffops/otrafsaf/tasas/ Highway%20Information/sequence.htm

- c. Distance references to identifiable points shall be stated in increments of 0.1 mile. If a distance reference tie is 1.0 mile or less, use the term "mile," if a reference tie is 1.1 miles or greater, use the term "miles."
- 4. When referring to an identifiable point, use the full name descriptions (example: "SANTA ANA RIVER BRIDGE," "NORMANDIE AVENUE OVERCROSSING," etc.).
- 5. Do not use abbreviations in the project description.
- 6. Do not use punctuation marks, except commas, when the listing of three or more counties or cities are in the project description.
- 7. Do not use "Interchange" in the project description (example: Use "ROUTE 710/405 SEPARATION," not "ROUTE 710/405 INTERCHANGE)." Do not use "Junction" or "Intersection" to describe the intersection of highways, except in those rare instances where a break in the route creates two separate intersections of a highway with another highway. In these instances, the intersection points may be described (example: "NORTH JUNCTION ROUTE 79," etc.).
- 8. Do not use freeway names, such as "Golden State Freeway," in the project description.
- Use structure numbers only if there may be some confusion as to which structure is referred to (example: bridges crossing the same waterway with the same name but different numbers).

#### Project Descriptions continued

#### b) Listing County or Counties Where the Project is Located

- List the county or counties where the project is located as the first part of the project description (example: "IN SHASTA COUNTY"). If the project is in two or more counties list all counties involved (example: "IN SANTA CLARA AND SANTA CRUZ COUNTIES").
- 2. The listing of a county or counties in the project description is based on the "limits of construction" not the "limits of work."
- c) Listing City or Town Where the Project is Located List the city or town where the project is located as the next part of the project description, except as described in Subsection 7 below.
  - If the project is entirely within the city limits of an incorporated city, use the term "in" (example: "IN OAKLAND"). Check in the front of the current THOMAS BROTHERS guide under "CITIES AND COMMUNITIES INDEX" or go to this web address to determine if the city is incorporated: <a href="http://www.answers.com/topic/list-of-cities-in-california">http://www.answers.com/topic/list-of-cities-in-california</a>
  - 2. If the project is both inside and outside the city limits of an incorporated city, use the phrase "in and near" (example: "IN AND NEAR OAKLAND").
  - 3. When the project is at an unincorporated city, town or name place; use the term "at" not "in" (example: "AT KRAMER"). Check in the front of the current THOMAS BROTHERS guide under "CITIES AND COMMUNITIES INDEX" or go to this web address to determine if the city or town is unincorporated: <a href="http://www.answers.com/topic/list-of-cities-places-and-neighborhoods-in-california">http://www.answers.com/topic/list-of-cities-places-and-neighborhoods-in-california</a>
  - 4. If the project is not within a town or city, make reference to the nearest city or town shown on the current State highway or county road map that is on the route where construction is to take place. Use the term "near" (example: "NEAR GILROY").
  - 5. If the project location is more than five miles from a city or town, use the term "about" and a distance (example: "ABOUT 8 MILES WEST OF TURLOCK").

- When referring to a city, do not use the phrase "the city of" except in the case of "IN THE CITY AND COUNTY OF SAN FRANCISCO" specifically.
- 7. Omit city or town names from the project title description if:
  - a. the project consists of three or more locations on the same route and the construction locations cover a lengthy section of highway (greater than six miles).
  - b. the project consists of three or more locations spread over two or more routes or two or more counties.

#### d) Project Construction is on One Route

When the project is only on one route, the route designation is not listed in the project description and the following applies:

 If the project is on one route with a continuous length of construction which is 0.2 mile or greater, describe the begin and end points of construction by using the "From...To..." format.

#### Example:

# IN LOS ANGELES COUNTY NEAR NEWHALL FROM 0.1 MILE SOUTH OF WELDON CANYON OVERCROSSING TO 0.3 MILE NORTH OF CALGROVE BOULEVARD UNDERCROSSING

2. If the project consists of two locations on one route (with individual lengths of construction greater than 0.2 mile), describe begin and end points of construction for each location using the "From... To..." format. The distance between the end point of construction of the first location and the begin point of construction of the second location is to be greater than 0.2 mile when using this type of project description. (If the gap distance between locations of construction is less than 0.2 mile, use the "From... To..." format to describe the begin point of the first location as the begin point of construction and the end of the last location as the end point of construction). Example:

IN LOS ANGELES COUNTY

NEAR NEWHALL FROM 0.1 MILE SOUTH

TO 0.3 MILE NORTH OF WELDON CANYON

OVERCROSSING AND FROM 0.4 MILE SOUTH

TO 0.3 MILE NORTH OF CALGROVE BOULEVARD

UNDERCROSSING

#### Project Descriptions continued

3. If the project consists of two locations on one route with one construction location greater than 0.2 mile and one construction location less than 0.2 mile, describe begin and end points of construction for the location greater than 0.2 mile in length by using the "From... To..." format, describe the location less than 0.2 mile in length by using a spot location description "At..." Example:

IN LOS ANGELES COUNTY

NEAR NEWHALL FROM 0.1 MILE SOUTH

TO 0.3 MILE NORTH

OF WELDON CANYON OVERCROSSING AND
AT CALGROVE BOULEVARD UNDERCROSSING

4. If the project consists of two locations on one route (with individual lengths of construction less than 0.2 mile), describe the locations by using two spot location descriptions "At... and At..."

Example:

IN FRESNO COUNTY
IN FRESNO AT BIOLA JUNCTION OVERHEAD
AND AT HERNDON CANAL BRIDGE

If the project consists of one location on one route (with length of construction less than 0.2 mile), a point description is appropriate.

Example:

IN MENDOCINO COUNTY
NEAR MENDOCINO
AT BIG RIVER BRIDGE

6. If the project consists of one or more locations within 0.6 mile radius of the center of a route separation, use a spot location description.

Example:

IN LOS ANGELES COUNTY
IN LOS ANGELES AT ROUTE 5/118 SEPARATION

7. If the project consists of three or more locations on the same route, describe the begin point of the first location as the begin point of construction and the end of the last location as the end point of construction. The phrase "AT VARIOUS LOCATIONS" shall be used prior to describing the begin and end points of construction.

#### Example:

IN LOS ANGELES COUNTY NEAR NEWHALL
AT VARIOUS LOCATIONS FROM 0.1 MILE SOUTH
OF WELDON CANYON OVERCROSSING
TO 0.3 MILE NORTH OF CALGROVE
CANYON BOULEVARD UNDERCROSSING

#### e) Project Construction is on Two Routes

Where the project is on two routes, the route designations are listed in the project description and the following applies:

 If the individual length of construction on each of the two routes is 0.2 mile or greater, indicate the corresponding route designation before the begin and end points of construction for each of the two locations.
 Example:

IN SAN DIEGO COUNTY IN EL CAJON
ON ROUTE 8 FROM 0.3 MILE WEST OF MOLLISON
AVENUE UNDERCROSSING TO MOLLISON AVENUE
UNDERCROSSING AND ON ROUTE 67 FROM 0.2 MILE
TO 0.5 MILE NORTH OF ROUTE 67/8 SEPARATION

2. If the length of construction on one route is 0.2 mile or greater and the length of construction on the other route is less than 0.2 mile, indicate the corresponding route designation before describing the begin and end points of construction for the location greater than 0.2 mile in length by using the "From...To..." format and indicate the corresponding route designation before describing the location less than 0.2 mile in length by using a spot location description "At."

#### Example:

IN SAN DIEGO COUNTY IN EL CAJON
ON ROUTE 8 FROM 0.3 MILE WEST OF
MOLLISON AVENUE UNDERCROSSING
TO MOLLISON AVENUE UNDERCROSSING
AND ON ROUTE 67 AT
BROADWAY UNDERCROSSING

#### Project Descriptions continued

3. If the individual length of construction on each of the two routes is less than 0.2 mile, indicate the corresponding route designation before each of the two spot locations. Example:

IN SAN DIEGO COUNTY IN EL CAJON
ON ROUTE 8 AT MOLLISON AVENUE UNDERCROSSING
AND ON ROUTE 67 AT BROADWAY UNDERCROSSING

#### f) Project Construction is on Three or More Routes

Where the project consists of three or more locations spread over two or more routes or two or more counties, the route designations are not listed in the project description. Use the phrase "AT VARIOUS LOCATIONS" for the project limits description following the reference to the counties. Omit city or town names from the title description. Refer to "Projects Construction on Three or More Routes" in Section 2-1.7 for additional instructions.

#### Example:

IN SANTA CLARA AND SANTA CRUZ COUNTIES
AT VARIOUS LOCATIONS

#### Project Limits of Construction and Work

Project limits of construction and work shall be shown on the title sheet for the route or routes involved, except for the following project types:

- building construction project,
- project consisting of three or more locations on two or more routes,
- project consisting of three or more locations in two or more counties, or
- project at a spot location.

#### Limits of Construction

The identified limits of construction shall be the physical limits of the predominant type of construction to be performed on the individual project. This construction is that which will remain in place at the completion of the contract. Some examples of what could be the predominant type of construction on a project are:

- new highway alignment,
- widening existing highway (adding new traffic lane(s) or shoulder),
- reconstruction of the existing pavement structure (structural section),
- new surfacing over existing pavement,

- grinding or grooving of existing pavement,
- · new median barrier.

Some additional examples of what could be the predominant type of construction on a project are:

- sound walls,
- retaining walls,
- highway planting and irrigation systems,
- electrical systems, etc.

The begin and end points of construction shall:

- be shown whenever there is a distance of 0.2 mile or more between the begin and end points of construction,
- be referenced by post mile and station, where the construction is identified on the layout sheets by stationing,
- be referenced only by post mile, where construction is only identified by post miles

Post miles shall be shown in increments of 0.1 mile.

The post mile values shown in the upper right corner of the title sheet shall be the post mile values of the begin and end points of construction. If the construction to be performed is at a spot location (less than 0.2 mile), a single post mile value shall be used and such construction shall be identified as shown on the title sheet examples.

#### Limits of Work

The limits of work shown on the title sheet for the route or routes involved shall include the temporary work to be performed in advance of and beyond the identified limits of begin and end of construction. This work, such as lane closures and advance construction area signing (i.e. the first "ROAD CONSTRUCTION AHEAD" sign), will *not* remain in place at the completion of the contract.

Begin and end points of work shall be:

- referenced by station, where the construction and work is identified on the layout sheets by stationing, or
- referenced only by post mile, where construction is only identified by post miles (post miles shall be shown in increments of 0.1 mile).

Do not use wording such as "1000 feet beyond End of Construction" to define work limits.

#### General

If construction is to be performed on cross roads or streets that intersect or are adjacent to the construction on the state route or routes, the begin and end points of construction on these roads or streets shall be identified as "limits of work."

The work involved in the installation of construction area signs at intersecting cross roads or on streets adjacent to the route or routes on which construction is to be performed shall not be reflected in the described project limits of construction or work.

Detours to divert traffic to alternate routes to reduce traffic delays within the limits of project construction, including placement of traffic advisory or other informational signs well beyond the limits of the project, shall not be reflected in the identified limits of project construction or work nor shall these signs be shown on the title sheet. Traffic advisory or other informational signs used on the project for transportation management are to be shown on the transportation management project plan sheets.

Certain types of projects, such as resurfacing, or seal coat, generally will not require stationing to be shown on layout sheets to identify the limits of construction or work. For these types of projects, the begin and end points of construction and the begin and end points of work should be shown by post mile only.

Where construction on a route is to be performed in adjacent separate projects, the limits of construction and associated project descriptions for the adjacent projects shall not overlap. To minimize description overlaps, construction involved in transitioning from the alignment of new traffic lanes to the existing alignment of traffic lanes (example: transition traffic striping or temporary route connection construction) may be included within the identified limits of work instead of the identified limits of construction. Limits of construction on adjacent projects can not overlap, but limits of work can.

Other plan sheets (layouts, drainage plans, etc.) should not show construction of a permanent nature beyond the begin and end points of construction shown on the title sheet.

Title sheets shall be oriented so that stationing progresses from left to right. On projects where stationing is in the opposite direction from post miles, the title sheet strip map is to be shown with stationing increasing from left to right to

orient the strip map the same as the plan sheets. However, the project title, begin and end of construction, and begin and end of work shall be in order of post miles.

Project limits shown on the title sheet for a building construction project, a project consisting of three or more locations on two or more routes, a project consisting of three or more locations in two or more counties, or a project at a spot location shall conform to the respective title sheet examples included in this manual.

#### **Locations of Construction**

Where the project consists of three or more locations on two or more routes or three or more locations in two or more counties, and the phrase "AT VARIOUS LOCATIONS" is used to describe the project limits of construction, a table with a heading of "Locations of Construction" shall be included.

The "Locations of Construction" table is to be placed on the title sheet when sufficient space is available. If the number of locations exceeds the number that can be identified within a table on the title sheet, (typically more than 15 locations), the table of all of the locations of construction shall be placed on a separate sheet called "Locations of Construction." This sheet shall immediately follow the title sheet. When the "Locations of Construction" sheet is used, a note is to be placed on the title sheet directing attention to the added sheet. Example: "The table of locations of construction is shown on the Locations of Construction sheet."

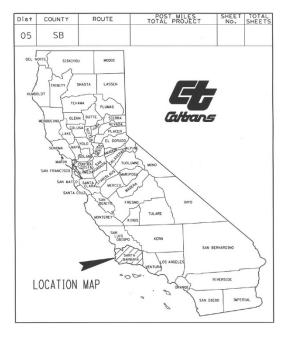
Regardless of which sheet the "Locations of Construction" table is placed on, it shall list all of the project construction location numbers and associated counties, routes, post miles; and where applicable, bridge number, direction of travel, etc.

#### **Title Sheet Location Map**

The project location shall be indicated on the preprinted location map Location. See pages 3-13 thru 3-14.

## Title Sheet Location Map Samples SAMPLE "A"

Project location in one county. Outline county and denote county with hachure marks. Show one location arrow



#### SAMPLE "B"

Project location in one county. Outline county and show one location arrow. No hachure marks used due to limited space available.



#### SAMPLE "C"

Project location in city and county of San Francisco. Show only one location arrow for this county.



#### SAMPLE "D"

Project location in multiple counties with contiguous borders. Outline each county and denote each with hachure marks. Show only one location arrow.



#### Title Sheet Location Map Samples continued

#### SAMPLE "E"

Project location in two separate counties with no contiguous borders. Outline each county and denote each with hachure marks. Show a location arrow for each county.



#### Additional Instructions for Location Maps

Except for San Francisco County as shown in Sample "C" county lines shall be outlined for each county in which the project is located

Use hachure marks within the county area in which the project is located unless space is not available. See Sample "B" and Sample "C" for counties not requiring hachure marks.

Hachure marks shall not extend through county names.

A location arrow or location arrows shall be shown. See Title Sheet Location Map Samples.

No other information or symbols shall be shown within the location map area.

#### Checklist for Title Sheet

- Dist, county and route (upper right corner) TX=8.75, FT=3, WT=2, LV=10. For building work, use location code in space usually reserved for route number. There is a special border sheet for building work called AC = BTITLE
- Post mile (upper right corner) TX=8.75, FT=3, WT=2, LV=10
- County or counties in which project is located shown on the small-scale State location map
- Location arrow on State map (upper right corner)
   AC=LOCARR, LV=10
- Standard north arrow AC=NARR, LV=10
- Contract No. 00-000004 (lower right corner) TX=12, FT=43, WT=0, LV=10
- CU No. and EA No. (lower right corner) TX=7, FT=3, WT=1, LV=10
- "NO SCALE" TX=8.75, FT=3, WT=2, LV=60
- Signature, date of signature and current registration seal information completed on Level 63, (lower right corner).
   Drafting reviewers will attach signatures when project goes to PS&E. Text height should be 7, the text width can be squeezed to fit the area using element selection.
   If both names are long, the first name can be above the last name. FT=3, WT=1
- Information inserted in project development name block spaces in left margin of sheet.
- Project title description TX=14.5, FT=43, WT=0, LV=10. No abbreviations allowed
- Strip map of the project (Except for a project consisting
  of three or more locations on two or more routes or a
  project consisting of three or more locations in two or
  more counties which do not require greater detail on
  the title sheet. County mapping, with involved routes
  identified, are typically used for these projects, see
  "Title Sheet Examples")

#### Checklist for Title Sheet continued

- Identify all routes shown on the strip map. Do not use route shields. The following typically applies to route identification where work is being performed: TX=8.75, FT=3, WT=2, LV=60 – On routes where no work is being performed, the following may apply: TX=7, FT=3, WT=1, LV=60
- Stationing and equations (where the construction and work is identified on the layout sheets by stationing)
- BEGIN AND END CONSTRUCTION (identify by post mile and station), TX=12, FT=43, WT=0, LV=60, ALL UPPER CASE.
- Begin and End Work (identify by station.) TX=10, FT=3, WT=2, LV=60, Upper and Lower Case
- Destination with arrow at strip map edges. Upper and Lower Case lettering. AC=T1ARR (e.g., To Los Angeles)
- City/county/state/international boundary limits, as well as TERO – Indian reservation land boundary
- Station and post mile equation at county lines where construction extends into another county
- Names of incorporated cities (ALL UPPER CASE) TX=10, FT=43, WT=0, LV=60. See instructions under the subheading "<u>Project Descriptions</u>" on page 3-8 to determine if a city is incorporated.
- Names of unincorporated areas (Upper and Lower Case Lettering) TX=10, FT=43, WT=0, LV=60. See instructions under the subheading "Listing City or Town Where the Project is Located" under the heading: "Project Descriptions" on page 3-8 within this Section to determine if a city or town is unincorporated.
- If a state (Nevada, Oregon or Arizona) or country (Mexico) appears on the title sheet, use: TX=11, FT=43, WT=0, LV=60
- · Bridge shown by symbol

- Name and type of bridge or other transportation related structure (e.g., Thomas Street Overcrossing or Undercrossing)
- Bridge numbers (if work is to be performed on bridge or other transportation related structure and plans prepared by Office of Structure Design are included)
- Street names TX=7, FT=3, WT=1, LV=60. Make sure street names are shown where streets cross the project or where work is being performed. Identify all geographic features that appear in the project title such as streets, bridges, etc. Use abbreviations as shown in Standard Plans, but match the text case of the abbreviation to the name of the geographic feature
- Label names of waterways and bodies of water.
   Waterways (rivers, creeks, canals): Upper and Lower
   Case, TX=7, FT=3 at 25° slant, WT=1, LV=60. Bodies of water: Lakes, Reservoirs, Ponds: Upper and Lower
   Case, TX=7, FT=3 at 25° slant, WT=1, LV=60. BAYS ALL UPPER CASE, TX=8.75, FT=3 at 25° slant, WT=2, LV=60. OCEAN ALL UPPER CASE, TX=12, FT=3 at 25° slant, WT=2, LV=60
- Railroads shown and labeled for geographic references.
   Spell out railways in Upper and Lower Case. TX=7,
   FT=3, WT=2, LV=60. If project has railroad involvement, railroad clearance from right of way may be required
- Mandatory material and disposal sites. (Use of mandatory sites to be avoided where possible) If the sites are not within project limits, include in Materials Handout and not on the title sheet
- Environmentally sensitive area (ESA) limits

### Title Sheet Examples

3-17 <u>Highway Planting w/CADD Information</u>
 3-18 <u>Example Mitigation Title Sheet 1</u>
 3-19 <u>Example Mitigation Title Sheet 2</u>

**NOTE**: Additional Title Sheets are included in the Plans Preparation Manual published by DES-0E.

